Sun Fire™ V440 Server

A data center-class, rack-optimized server that sets
the new standard for low-cost network computing

Sun microsystems

Key Feature Highlights

- Up to four 1.593-GHz UltraSPARC® IIIi CPUs, each with 1 MB L2 cache

- 32 GB memory capacity

- Integrated dual-channel SCSI disk controller

- Two 10/100/1000 Mb/sec. Ethernet ports

- Solaris™ 8, Solaris 9, and Solaris 10 Operating System

- 1+1 hot-plug power supplies/hot-pluggable disks

- Six full-length, industry-standard PCI bus slots

- Rack-optimized, 4U enclosure

- Hardware disk mirroring

- Front and rear power and fault LED indicators

- Expanded front-access capabilities: Up to four hot-plug disk drives, power switch, media bay, and power supplies

- Advanced Lights Out Manager

- System Configuration Card (SCC) allows system identity to be transferred to standby systems

> ### Value, Availability, and Manageability

The Sun Fire V440 server is a data center-class, entry-level server that is powered by up to four 1.593-GHz UltraSPARC IIIi processors. Features such as six PCI slots, two 10/100/1000 Mb/s Ethernet ports, up to four disk drives, and 32 GB of memory prove the rack-optimized Sun Fire V440 server has the capacity to meet the needs of compute-intensive applications. The Sun Fire V440 server also contains high-availability and manageability features in a compact, 4U package. Hot-plug, front-accessible disk drives; redundant hot-plug power supplies (with independent cords); and a System Configuration Card that permits easy and quick identity transfer enhance the Sun Fire V440 server's uptime. Easily visible system and component LEDs provide serviceability features that enable quick diagnosis and repairs, while the system's Advanced Lights Out Manager (ALOM) provides remote management and diagnostic capability.

Value

UltraSPARC IIIi delivers price/performance and rock-solid Solaris reliability in a rack-optimized enclosure on an entry-level server. Customers can run demanding, mission-critical applications in a low-cost, secure environment.

Low-Cost Network Computing

UltraSPARC IIIi processors and support for the Solaris Operating System, Sun Java™ Enterprise System software, and Sun™ Cluster 3.0 make the Sun Fire™ V440 the ideal server for Web infrastructure computing, corporate compute farms, hosting, and custom-application deployment.

Reducing Complexity

Advanced Lights Out Manager (ALOM) provides remote management functionality, lowering the requirement for onsite staff. The System Configuration Card increases availability by allowing quick and easy system ID transfer. Support for the SunSM Install Check tool enables customers to confirm proper initial system configuration and installation.

Improve TCO

Low acquisition and support costs, low power and cooling requirements, and binary compatibility provide greater flexibility in high-density, horizontal- scaling environments.

Sun Fire V440 Server System Requirements

Architecture	
Processor	Two to four UltraSPARC IIIi 1.593 GHz
Architecture	64 bit, 4-way superscalar SPARC® V9
Cache	64 KB data, 32 KB instruction and 1-MB integrated L2

Main Memory
4 DIMM slots per processor, registered DDR-1 SDRAM system configurations from 4 GB to 32 GB

Standard/Integrated Interfaces

Network	Two 10/100/1000Base-T Ethernet
NetworkOne management	10Base-T Ethernet
Serial management	One TIA/EIA-232-F (RJ45) port
Serial	One TIA/EIA-232-F asynchronous (DB9) Port
SCSI	One Ultra320 SCSI (LVD)
USB	Four OHCI-1.0-compliant Interfaces, supporting dual speedsof 12 and 1.5 Mbits/sec. each
Expansion Bus	Six internal PCI 2.2-compliant expansion slots: Three 64-bit, 33/66-MHz, 3.3-V, full-length Three 64-bit 33-MHz 5-V full-length
System Configuration Card	Front-accessible for transfer of system configuration information, including host ID

Mass Storage and Media

Internal Disk	Up to four hot-plug Ultra320 SCSI 73-GB disks
Internal DVD	One Slimline ATAPI DVD-ROM
External Disk	Sun StorEdge™ 3310 SCSI Sun StorEdge 3310 NAS Sun StorEdge 3510/3511 Sun StorEdge 3120 Sun StorEdge D240 Sun StorEdge S1 Sun StorEdge 6120/6320 Sun StorEdge 3900 Sun StorEdge 6900 Sun StorEdge 9900
External Tape	Sun StorEdge DLT8000 Flexipack Sun StorEdge SDLT 220 Sun StorEdge SDLT 320 Sun StorEdge DAT 72 Sun StorEdge LT02 Sun StorEdge L7 Sun StorEdge L8 Sun StorEdge L25 Sun StorEdge L100

Software

Operating System	Solaris 8 (Hardware Release 07/03 or later), Solaris 9 12/03, and Solaris 10 (preinstalled)
Enterprise infrastructure software	Sun Java Enterprise System 2004Q2* available on select configurations only
Languages	C/C++, FORTRAN, Sun Java™ program-ming language; all other standard Sun-supported languages
Networking	ONC™, NFS, TCP/IP, SunLink™, OSI, MHS, IPX™/SPX
Management	Sun™ Management Center Sun SNMP Agent Sun N1 System Manager Advanced Lights Out Management (ALOM) Sun Net Connect Sun Update Connection

Power Supplies

One required, two for redundancy (hot-swappable) with separate power cords	
Maximum AC Power	650 W
Typical AC Power	570 W

Environment

AC power	90 Œ 264 V AC (47 Œ 63 Hz)
Operating Temperature	5° C to 40° C (41° F to 104°), 20% to 80% relative humidity, noncondensing, 27° C max. wet bulb
Nonoperating temperature	-40° C to 60° C (-40° F to 140°), up to 93% relative humidity, noncondensing, 38° C max. wet bulb
Altitude (operating)	Up to 3000m
Altitude (non-operating)	Up to 12,000m
Acoustic noise	6.7 Bels operating and 6.7 Bels Idle

Regulations (meets or exceeds the following)

Product safety	UL approval to UL 60950, EN60950, C22.2 No.60950, and CB Report for IEC 950; all including Amendments 1, 2, 3, 4 and 11 and full worldwide deviations. TUV approval to EN60950/IEC 950. GOST Certification for Eastern Block countries. Korean MIC Certification. China CCC mark using UL as agent. CE Declaration of Conformance (SMI self-declaration) to The Electromagnetic Compatibility Directive and Low Voltage Directive with accompanying "Technical Data File." Approval to Argentinian standards using UL as agent.
EMI	47 CFR 15B (Code of Federal Regulations,Part 15, Subpart B) Class A; EN55022 Class A per EMC Directive 89/336/EEC (CE Mark); VCCI Class A; Industry Canada ICES-003; AS/NZ 3548 (Australia/New Zealand); CNS 13438 (Taiwan); KSC 5858 (MIC Mark/Korea)
RoHS	Restriction of Hazardous Substances – RoHS compliant configurations available

Get the details.
Find out more about the Sun Fire V440 server – an ideal solution for e-mail, hosting, e-commerce, OLTP, and online banking, supply chain, and database management, inventory management, CRM, ERP, EDA, MCAD, and simulations – by visiting: sun.com/v440.

Immunity Certifications

IEC 1000	EN55024 per EMC Directive 89/336/EEC, including IEC 61000- 4-2 Electrostatic discharge immunity test IEC 61000-4-3 Radiated, radiofrequency, electromagnetic field immunity test
	IEC 61000-4-4 Electrical fast transient/burst immunity test IEC 61000-4-5 Surge immunity test IEC 61000-4-6 Immunity to conducted disturbances, induced by radio-frequency fields IEC 61000-4-8 Power frequency magnetic field immunity test
	IEC 61000-4-11 Voltage dips, short interruptions and voltage variations immunity tests
Line distortion	EN 61000-3-2 per EMC Directive 89/336/EEC
Voltage fluctuations and flicker	EN 61000-3-3 per EMC Directive 89/336/EEC

Dimensions and Weight

Height	174 mm (6.85 in.)
Width	440 mm (17.3 in.)
Depth (including bezel)	635 mm (25 in.)
Weight	37 kg (82 lb.) fully configured
Enclosure	Fits into a standard 19-inch wide rack-mount kit that complies with EIA-310-D1992 standard

Upgrades

Upgrades are available for SPARC server and Sun Enterprise™ systems. Contact your local Sun sales representative for details

Warranty

Hardware support	3 years
Software install	90 days
Call response	8 hours
Delivery	Second business day, on-site

02/06 SunWin# 386027